



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,299	02/12/2004	Paul E. Share	13015/39281	5310

62127 7590 11/02/2006

VALSPAR SOURCING, INC.
1101 SOUTH THIRD STREET
MINNEAPOLIS, MN 55415

EXAMINER

DANIELS, MATTHEW J

ART UNIT	PAPER NUMBER
----------	--------------

1732

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,299

Applicant(s)

SHARE ET AL.

Examiner

Matthew J. Daniels

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-21 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-21 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the reply filed 14 August 2006, Claims 1 and 5 were amended, Claims 4 and 22-24 were cancelled, and new claims 25-27 were presented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-4, 6-15, 17-21, 25** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Collette et al (5759653).

As to Claim 1, Collette et al teach a method comprising the steps of: (a) forming a preblend/masterbatch (col 5 lines 6-7) comprising: a diluent polyester (col 5 line 17), a polyamide material (col 5 line 18), and an oxygen scavenging material (col 5 line 19); providing a base/core layer polyester (col 5 line 31); introducing the preblend and the base polyester into a molding apparatus to permit melting and admixing of the preblend and the base polyester (col 5 lines 29-65); injection molding or extruding the admixture in the apparatus to provide a preform (fig 3, 59); and expanding the preform to provide a plastic container having a barrier layer (fig 6 & 7), wherein the plastic container has oxygen scavenging property that is activated after filling the container with an aqueous fluid (7:24-33, 7:59-63, 8:46-51).

Alternatively, Applicant admits that in one embodiment that “Collette et al. teaches a method for forming a plastic container that includes an oxygen scavenger that is activated *before* filling the container with product such as an aqueous fluid.” (Remarks, Page 9, last 3 lines). In this regard, Applicant admits that Collette teaches the claimed step, but disputes the claimed order. However, it is has been held that in the absence of new or unexpected results, any order of performing process steps is prima facie obvious. See MPEP 2144.04(IV)(c). Also see cases cited therein, namely *Ex parte Rubin*, 128 USPQ 440 (Bd. App. 1959), or *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946), or *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930). As this claim appears to be directed to a difference in the order of performing a process step which Applicant admits to be present in the reference, and has not argued or provided any new or unexpected result, this claim would have alternatively been prima facie obvious over Applicant’s admission of the teaching of the step.

As to Claim 2, Collette et al teach that the plastic container is a multilayer plastic container (fig 7).

As to Claim 3, Collette et al teach that the plastic container is a monolayer plastic container (col 1 line 51).

As to Claim 6, Collette et al teach that the preblend is in a form of solid particles (col 5 line 26).

As to Claim 7, Collette et al teach that the diluent polyester is present in the preblend in an amount of about 25% to about 75%, by weight of the preblend (col 16 line 3-7).

As to Claim 8, Collette et al teach that the diluent polyester comprises polyethylene terephthalate and polyethylene naphthalate (col 14 line 22-27).

As to Claim 9, Collette et al teach that the polyethylene terephthalate comprises a virgin bottle grade polyethylene terephthalate, a post consumer grade polyethylene terephthalate, or a mixture thereof (col 5 lines 10-32).

As to Claim 10, Collette et al teach that the polyamide material is present in the preblend in an amount of about 25% to about 75%, by weight of the preblend (col 15 line 17).

As to Claim 11, Collette et al teach that the polyamide material comprises a polymer containing m-xylylenediamine monomer units (col 10 line 51).

As to Claim 12, Collette et al teach that the polyamide material comprises a polymerization product of m-xylylenediamine and adipic acid (col 10 lines 51-52).

As to Claims 13-15, Collette et al teach an oxygen scavenging material present in the preblend in an amount of about 50 to about 1000 parts per million, by weight and comprises cobalt or a metal complex thereof (col 1 lines 53-54).

As to Claim 17, Collette et al teach that the base polyester is in a form of solid particles (col 5 lines 59-67).

As to Claim 18, Collette et al teach that the preblend and the base polyester are admixed in an amount of about 0.5% to about 20%, by weight, of the preblend, and about 80% to about 99.5%, by weight, of the base polyester (col 16 lines 8-11).

Art Unit: 1732

As to Claim 19, Collette et al teach that the base polyester is polyethylene terephthalate (col 5 line 31).

As to Claim 20, Collette et al teach that the polyethylene terephthalate comprises a virgin bottle grade polyethylene terephthalate, a post consumer grade polyethylene terephthalate, or a mixture thereof (col 5 lines 11-32).

As to Claim 21, Collette et al teach that the preform contains about 10 to about 80 ppm, by weight, of the oxygen scavenging material (col 1 line 53).

As to Claim 25, Collette teaches that the containers are maintained in refrigeration or desiccation (7:25-28), and hot filling (7:61) or filling with water (8:46-51), which would inherently activate the oxygen scavenging property for those catalysts which activate at room temperature (7:29-30).

3. **Claim 26** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Collette et al (5759653). Collette teaches the subject matter of Claim 1 above under 35 USC 102(b). **As to Claim 26**, the package of Collette, by teaching all of the claimed process steps and ingredients, would inherently meet the claimed result. Additionally, Collette teaches between 0.1 and 0.2 cc oxygen/square meter after 24 hours, and the total permeability *of the package* could obviously be reduced by a reduction in package size or an increase in wall thickness, and Collette expressly does not limit the invention to any particular package structure (8:4-6). Conventional packages are significantly smaller than 1

Art Unit: 1732

square meter, and one would have found it *prima facie* obvious that smaller packages for smaller portion sizes would thus provide the claimed *package* permeability.

4. **Claim 27** is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Collette et al (5759653). **As to claim 27**, Collette et al teach a method comprising the steps of: (a) forming a preblend/masterbatch (col 5 lines 6-7) comprising: a diluent polyester (col 5 line 17), a polyamide material (col 5 line 18), and an oxygen scavenging material (col 5 line 19); providing a base/core layer polyester (col 5 line 31); introducing the preblend and the base polyester into a molding apparatus to permit melting and admixing of the preblend and the base polyester (col 5 lines 29-65); injection molding or extruding the admixture in the apparatus to provide a preform (fig 3, **59**); and expanding the preform to provide a plastic container having a barrier layer (fig 6 & 7), wherein by teaching the claimed ingredients and process steps, the plastic container would inherently have oxygen permeability that is less after 48 hours than the oxygen permeability of the container prior to filling with water (8:46-67). Note that the claim does not include any process step that distinguishes the claimed process from the prior art, and Applicant's arguments do not dispute the presence of limitations (a)-(e) in the reference as also cited in the rejection of Claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1732

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 5 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Collette et al (5759653) in view of Nilsson et al (5034252). Collette teaches the subject matter of Claim 1 above under 35 USC 102(b). **As to Claim 5**, Collette et al do not explicitly teach that the preblend has a greater stability after storage for six months at 25°C and 40% relative humidity than a blend containing only a polyamide material and an oxygen scavenging material storage under identical storage conditions. However, Nilsson et al teach greater stability/low permeability coefficient when material in the preform is allowed to undergo an aging process under a given relative humidity and temperature such as 50% relative humidity, 55°C for 3 weeks (col 6 lines 12-56). Although, Nilsson et al do not explicitly teach aging for 6 months at 25°C and 40% relative humidity, the examiner notes that discovering the optimum value of a result effective variable involves only routine skill in the art. See MPEP 2144.05 II and *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to one of ordinary skill in the art at the time of invention to use the Nilsson et al's teachings in Collette et al's method of making container having barrier properties in order to lower the permeability coefficient (col 6 lines 12-16).

As to Claim 16, Collette et al teach that the preblend comprises about 50% virgin PET and about 50% polyamide including 3000-6500 ppm metal catalyst (col 16 lines 5-7). However Collette et al do not explicitly teach 50-1500 ppm, by weight, of an oxygen scavenging material. Nevertheless, Nilsson et al teach oxygen scavenging metal in the range of 50-1000 ppm, by weight (col 4 lines 12-27). Therefore it would have been obvious to one ordinary skill in the art

Art Unit: 1732

at the time of invention to use the teachings of Nilsson et al in Collette et al's method of making container having barrier properties in order to form a barrier against oxygen (col 4 lines 15-16).

Response to Arguments

6. Applicant's arguments filed 14 August 2006 have been fully considered but they are not persuasive. The arguments appear to be on the following grounds:

- a) None of the cited references teaches a plastic container produced using a method as recited in Claim 1 having an oxygen scavenging property that is activated after filling. Collette teaches activating before filling (2:51-54).
- b) Applicants traverse the Examiner's assertion that Collette teaches activation after filling. The passage cited is from the prior art, and Collette teach exactly the opposite.
- c) Collette provides *accelerated* activation before filling. Collette shields the activated oxygen scavenger with EVOH to prevent activated oxygen scavenger from being consumed.
- d) Applicants assert that Claims 2-3, 5-21 are patentable by their dependence on Claim 1.

7. These arguments are not persuasive for the following reasons:

- a) Applicant's arguments do not argue any differences in the fabrication steps or ingredients, and thus it is unclear why the claimed effects are not inherent in the prior art, as asserted by the Examiner. Applicant cites column 2, however, the quote cited by Applicant's remarks appears instead in column 6, lines 51-54. However, Applicants remarks do not appear to consider Collette's other pertinent embodiments and teachings. Collette teaches that various catalysts may be used (7:1-9), and that water activated catalysts and catalysts that activate at room

Art Unit: 1732

temperature require special treatment (7:1-33 and 6:60-64), in particular exclusion of water and use of refrigeration (7:1-9, 6:60-64, and 7:29-31). The Examiner asserts that Collette clearly desires in some embodiments not to activate the scavenger when the article is maintained as an unfilled bottle (7:24-28). Collette clearly teaches “water-initiated catalyst systems” (7:2-3) coupled with teachings that “a change in oxygen barrier condition across the wall can be induced by water from the product which is transmitted through the wall.” (8:48-49), and these teachings anticipate the claimed order of activation and filling. Alternatively,

The citation argued by Applicant’s remarks is noted, but the Examiner asserts that it constitutes one non-limiting embodiment from an array of embodiments and teachings.

b and c) For the reasons provided above, the Examiner asserts that Collette teaches activation also after filling. Collette’s exclusion of water and elevated (room) temperature and subsequent hot filling or filling with water would inherently cause the claimed activation. Additionally, Applicant clearly admits that the claimed process step is present in the reference (Remarks, page 9, last three lines), but Applicant disputes only that the order is different. However, this argument, by itself, is insufficient to overcome the prima facie obviousness of the rearrangement or reordering of disclosed process steps. See MPEP 2144.04 (IV)(c) and cases cited therein.

d) The Examiner maintains the rejections of the dependent claims, and notes that these rejections have not been particularly argued.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 10/25/06



CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

10/27/06